

HEALTH AND SANITATION

^S N 128 I. Introduction

For the purposes of this section the region has been divided into three groups: (1) the Turkic people of Sinkiang (including the Eastern Turks, Kirghiz and Kazakhs), (2) the Tibetans of Chinghai and (3) the Chinese of the Northwest (including both Hans and Moslems).

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• 164 Measured by Western standards, the area as a whole lacks most modern facilities for maintaining high standards of health and sanitation. The shortage of trained personnel in the fields of medicine, dentistry and nursing is quite acute. These conditions may be due partly to the geographical location of the area, being in the deep hinterland, away from the center of China, and generally lacking a sufficient water supply. The common man's ignorance of the basic facts of health and sanitation contributes greatly to the spread of disease and to the lack of precautionary measures against the occurrence of certain diseases.

However, the local population, while living under what we consider unsanitary conditions, has built immunities to many diseases, to which a Westerner, living under the same conditions, would easily succumb. Some habits that we consider dangerous in spreading disease may actually be without any harmful consequences to the local people.

II. The Turkic Peoples of Sinkiang

^S 262 563 A. The Diet of the Turkic People

The daily diet of the sedentary Eastern Turks consists mostly of mutton and rice, with vegetables, both boiled and fried, including onions, potatoes, turnips, carrots and spinach, many forms of soups, and pilafs. Tea is the staple beverage, served with sugar and without milk. Bread, in the shape of circular rolls indented at the top, constitutes an important item in the diet. A variety of fruits, including melons, apples, pears, apricots, peaches, nectarines, pomegranates, plums, cherries, and mulberries, grow in profusion in Turkestan and are abundant during the summer.

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[539] The common people eat only twice during the day; in the morning and in the evening. The wealthy people frequently have feasts and eat a great abundance and variety of foods. Many of them suffer from abnormal obesity as a result of overeating and lack of exercise. A common proverb in Sinkiang warning against the folly of this type of behavior is the following, "He who eats sparingly eats ten times, but he who eats too much eats but once."

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[272] The diet of the Kirghiz and the Kazakhs, the nomadic Turks, differs somewhat from that of the sedentary Eastern Turks. Their diet is composed mainly of milk and mutton. From flour and

/Tibetans of Chinghai/

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262 on special occasions, enjoy many Chinese dishes, or Tibetan adaptations of them. One of the most popular dishes is a sort of steamed dumplings stuffed with meat. Another is whole mutton, semi-raw or roasted and eaten off the bone. A favorite beverage is a mildly fermented beer of barley or other grain. A more spirituous liquor is also widely appreciated.

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Vegetables are scarce and usually are purchased from the Chinese or Chinese Moslems on the Sino-Tibetan border. At that they are limited mostly to potatoes and onions. The nomadic Tibetans have little fondness for green vegetables and accept them to a lesser extent than do the sedentary groups.

B. The Predominant Diseases Among the Tibetans

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• 164 The most common diseases include the venereal diseases, stomach and intestinal disorders, rheumatism, eye and skin diseases and tuberculosis. Perhaps because of the cold climate, the high altitude and the consequent absence of flies, and the use of animal manure instead of night-soil for fertilizing the fields, cholera, typhoid and similar excrement-borne diseases are rare.

The incidence of some diseases seems correlated to whether the people are nomadic or sedentary. For example, Ekvall (1939) reports a higher incidence of syphilis among the agricultural Tibetans, and a somewhat higher gonorrhea rate among the nomads. Leprosy is practically unknown among the nomads but is very common among the farmers. One can infer that rheumatism would be more frequent among the nomads than among the farmers because of the former's greater exposure to chills and dampness. In common with other Tibetans and peoples of the inland areas whose supply of salt is from Tibet's salt lakes, goiters are prevalent. The digestive ailments may be attributed to the frequent inclusion of foreign matter, such as sheep wool or yak hair, in the food, and also to some of the methods used in food preparation. The eye ailments, can be traced in part to the venereal disease rates, in part to the hazards of wind, dust, smoke, and snow-glare on the high plateaus. The skin troubles may be traceable to the customs of rarely washing more than the hands and face, of never completely removing one's clothes, and the numerous population that shares the sheepskin garment with its human host.

Other health hazards among the Tibetans include infections of accidental and non-accidental wounds (many a child has suffered severe burns) incurred in raids. The Tibetans seem to have an extremely low resistance to epidemic diseases such as smallpox, scarlet fever and influenza. Ekvall reports that the Tibetans even suffered violent reactions to vaccination, quite out of proportion to their neighbors, the Chinese and Chinese Moslems. However, this low resistance is accompanied by a high fear of these infections. The tradition of strict quarantine, even to the point of

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*563 abandonment of the sick, is very strong, and to some extent helps
•164 limit the spread of contagious disease. (Cf. also Rijnhart, 1902).

(1958) The Tibetans are apt to attribute diseases to spirits, such as
*563 the sa-ndre, (earth-spirits), demons and wrongdoing in this or
•164 previous lives. The sa-ndre are especially feared, because they
753 afflict those who disturb the ground with leprosy; hence, the high
776 incidence of that dread disease among the farmers and its absence
among the nomads. Demons or devils are the sources of the epi-
demic diseases and the reason for the imposition of the strict
quarantine of their victims. Like their diseases the devils are
highly contagious. But, except for these ailments that have known
(1959) causes, the Tibetan will consult a doctor or someone whose home
remedies have proved successful. Under the latter category would
be included the various Christian missionaries and explorers,
traders, etc., who frequented Chinghai.

C. The Local Doctors

759 "...the treatment given by the native doctors generally means
757 an increase of agony to the sufferer. For headaches large sticking
*563 plaster are applied to the patient's head and forehead; for rheuma-
tics often a needle is buried in the arm or shoulder; a tooth is ex-
tracted by tying a rope to it and jerking it out...; a sufferer with
stomach-ache may be subjected to a good pounding, or to the
application of a piece of wick soaked in burning butter grease; or
if medicine is to be taken internally it will consist probably of a
piece of paper on which a prayer is written, rolled up into the
form of a pellet, and if this fails to produce the desired effect
another pellet is administered, composed of the bones of some
pious priest." (Rijnhart, 1902, p. 34).

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*563 Actually, Tibetan medical science is one of the ten major
subjects that, according to Buddhist classification, constitute the
whole of human knowledge. One of the nation's main medical
schools is located near Lhasa. Some of the major academic mon-
asteries also have medical schools and the person with the title
of manpa (sman-pa, doctor) is respected as highly learned. The
medical lore that is studied is that of ancient India. It is primar-
ily scientific, in that it is based on rational explanations of physio-
logy and pathology. The religious aspects are superficial additions
that do not affect too seriously the basically scientific approach.
There are different categories of disease apportioned according
to whether the sickness is the result of something wrong in this
life, in the previous life, or a combination of previous lives and
the present; whether the patient is male, female, child or desexed.
Then there are afflictions common to all regardless of sex or age.
These number 404 categories, 101 being attributed to each of the
four major elements, organs or vices, depending upon the inter-
pretation. (The original Brahmanical medicine had only 101 cate-

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by half a million people - even if they live mainly on rice - is bound to be formidable. No sewage system of any kind exists; its place is taken by an old established guild of public servants who can be seen every morning in large numbers making their way through the streets. The casks or buckets which dangle from the bamboo poles across their shoulders smell no better than you would expect them to. They are always full to the brim and their contents, which are eventually sold to truck gardens on the outskirts of the city, are a constant threat to the legs of the passers-by.... The buckets in which they carry their night soil down the hill are used, after being briskly rinsed, to carry their water up."

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Besides producing a very unpleasant picture, this description brings out the very serious problems connected with the lack of a proper sewage system. It also points out the many possibilities for spreading contagious diseases and infections.

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Tuberculosis is quite prevalent in China. Epidemic diseases are common also, such as typhoid and paratyphoid fevers, cholera and smallpox. Malaria and the two kinds of dysenteries, amoebic and bacillary also are present. Death at childbirth, both of infants and mothers, is quite high, because of the lack of adequate sanitary precautions during childbirth and the practices of the midwives, who do nothing to prevent infection of both mother and child.

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Winfield in his book states that "seventy-five per cent of all deaths in China are due to preventable diseases that are under control in the West; there are about 15 million deaths each year in China, of which 11,750,000 are due to preventable diseases." (China: The Land and the People, p. 111).

D. Medical Personnel

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The lack of Western-trained doctors, nurses, pharmacists and dentists in the Northwest is an extremely serious problem. Most people, because of the shortage of medical personnel, still go to the local herb-doctors. (A full description of the traditional Chinese science of medicine is given in the General Handbook). In many less acute cases, people either neglect to do anything or attempt to treat themselves by unscientific methods.

E. Efforts of the Government

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The Nationalist Government was aware of the serious shortage of medical personnel and equipment in all of China, including the Northwest. Two national organizations were established in the 1930's to deal with these problems: The Department of Public Health under the Ministry of the Interior, which had a Northwest-ern Office for the Prevention of Epidemics, and the National Health Department under the National Economic Council, which also had an office in the Northwest.

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487 under the Choni chief. From the neighbourhood of T'ao
 133 Chou fine views are obtainable over this great Min Shan
 range, rising like a gigantic wall of snow-patched rock
 immediately to the south of the river, its serrated peaks
 being, I should say, 16,000 to 17,000 feet in height. It here
 forms the divide between the Yangtzu and the Yellow
 River, and from it the Ch'inling Shan continues eastwards
 right across China to the plains of Honan, separating the
 rice-eating peoples of Central China from the wheat-eating
 inhabitants of the north. Should such a catastrophe ever
 occur as a temporary separation of Northern from Southern
 China, this great barrier range would form an ideal political
 boundary between the two States.

797 There is a station of an American mission at T'ao Chou
 (as also at Min Chou, Choni, and Titao) designed for work
 amongst the Tibetans of the Kokonor border. But as has
 been the case with missionary work on the Szechuan Tibet
 frontier, their efforts to influence the Tibetan tribesmen
 have been practically without result owing to the immense
 power of the lama church and its monasteries. This mysterious
 Sino-Tibetan borderland and the prospect of attacking
 lamaism in its native strongholds have attracted some of
 the finest missionaries in the East, who, however, find after
 years of strenuous work and self-denial, that they have only
 succeeded in influencing a few of the Chinese. In Tibetan
 Yunnan the Catholics, and on the Indo-Tibetan frontier the
 Moravians, have been working for the past 50 years or so,
 I believe with the same lack of success as far as the Tibetans
 are concerned; and in the case of the China Inland Mission,
 which worked for years amongst the Tibetans of the Szechuan
 marches, the only converts obtained were amongst the
 Chinese settlers of that region. Viewed from a missionary
 point of view, it therefore seems a doubtful policy to waste
 so much money and energy in attempting the impossible
 on the sparsely populated Tibetan borderland, when there
 are still many great centres, at any rate in the north-west,
 of the more receptive and friendly Chinese untouched.

• 164 The year after our visit there was an outbreak of pneu-
 monic plague round T'ao Chou, which appears to have
 originated in the same kind of grass country inhabited by
 nomads and marmots as the Manchurian outbreak of 1911.

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It seems to have been checked by the energetic action of the Chinese authorities acting under the advice of a British missionary doctor from Lanchou. The terrible thing about pneumonic plague in North China is that a patient once afflicted seems bound to die, which accounts for the amount of attention it attracts. But the ravages even of such an outbreak as the Manchurian one of 1911 seem small when compared with those of bubonic plague in India. The outbreak of 1911 caused a panic in North China amongst Chinese and foreigners alike, and the Legation Quarter in Peking barricaded itself behind its defences as though to repel another Boxer rising, though only a case or two occurred in the city; one does not hear of similar measures being taken in India.

From Lanchou Fu to Old T'ao Chou by the route we followed is a distance of about 1450 li and occupied some 24 day's travel.

000 in Dulan gomba. It is true, there was not much hope from the beginning for the gifted little boy. His heart was too weak. He died two days later. And while the sorrowing parents with their Chinese friends were carrying the coffin to a distant grave outside the city, the dreadful plague struck their second boy. Again, none of the remedies we tried helped. The child followed his brother into the grave after a few days.

The sorrow of the poor parents knew no bounds when we washed the child for the last time and laid him in his little coffin and closed it up. I have never before so much admired missionaries who in obedience to the old Bible command, go to far countries with their families in order to bring the blessings of the gospel to others, while they themselves usually harvest but ingratitude, and finally sacrifice their own families. No matter what one's views are about the question of missions, one has deep respect for such sacrificial courage. The China Inland Mission to which Mr. and Mrs. Ridley belong, combines a number of sects: High Church and Lutheran, as well as Brethern, Methodist, and members of the Salvation Army, etc. They all work together and for a salary that hardly meets their needs. During my time every active member, man or woman, got about 20 taels a month. This required good management, in spite of cheap living conditions.

• 164 After this sore trial, Mr. and Mrs. Ridley threw themselves into their work with twice the energy. At that time there were many sick to be cared for. Throughout Kansu it had not rained for several months and scarlet fever and diphtheria were taking a dreadful toll everywhere. Every day 18 to 20 bodies were carried out of the comparatively small city of Hsining fu. The Chinese simply threw many children over the walls where wild dogs and birds fought over their bodies.

One night I was called to a house where a young woman lay on a bench in the middle hall, dressed in her best silks, awaiting death. The Taoist priests had vainly attempted to cast out the disease with bells and gong, now the white magician should see what he could do. The coffin was already standing beside the woman and none of the relatives wanted to stay near her. I heard the death rattle as a servant led the way, bearing a candle.

165 The plague attacked young and old and there was hardly ever an effective remedy. The people maintained that bathing and sponging meant certain death. After this experience I was not surprised that the natives estimate child mortality in and around Hsining fu at

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floors of on an average 2,900-2,700 meters high.

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Even toward the end of September it was very rainy in and around Tao tschou. The precipitation remained within modest amounts but the sky was usually overcast. This was probably the reason why the night temperatures were not yet low and, in spite of the 2,760 meter altitude, hovered between $+2^{\circ}$ and $+6^{\circ}$, whereas at noon the air warmed up at various times to more than $+10^{\circ}$. As a rule there was almost no wind on the ground. The rain clouds came from the south-east or the west. On September 16 in the early morning we had snow with a gentle east wind and a westerly drift of clouds and only on the nineteenth, twentieth and twenty-first I noted thunderstorms in my meteorological diary. All three thunderstorms came from the west. September 24 when I said farewell to Tao tschou and its hospitable Americans, was a day of rain so that the animals slipped on the sticky loam earth and the pack animals were hardly able to make any progress. Mr. Ruhl accompanied me on the first two marches. So at first I had to say goodbye to Mrs. Ruhl, my extremely gracious and pretty hostess and her little baby. Even though the mission house in Tao tschou presented a very good and neat appearance - everywhere the guiding hand of the practical American woman was to be felt - nevertheless for a woman of our Western culture residence in the city must have been torture. Year in and year out one hears about nothing but war and pillage here, and the missionary work bears occasional fruit only among the Chinese and the widowed or lonely old Chinese women. Tangible success in mission work among Tibetans and Mongols is not to be thought of, of course, because of the omnipotence of the lamas. Besides, the European also battles the severe highland climate and the homesickness that comes from this seclusion from the world. In the summer of 1907 there was an imperial Chinese postoffice installed, but because of lack of other interests it was only obliged to forward missionaries' letters and every tenth day a messenger arrived who delivered mail that had been en route six weeks from Hsingan fu. As in Hsining fu, the population is frequently afflicted with diphtheria, scarlet fever and smallpox. Typhus and syphilis of course also reap large harvests and among the lung diseases of the region asthma plays an important role. A large percentage of the missionaries contracted smallpox. Mr. Simpson had acquired pock marks up there in carrying out his profession. A missionary who had just come up from the coast where he had been freshly vaccinated, died shortly before my arrival, of variola.

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